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<120> PT049P1

<130> Serine/Threonine Phosphatase Polynucleotides, Polypeptides, and Antibodies

<140> Unassigned

<141> 2001-08-30

<150> PCT/US01/06256

<151> 2001-02-28

<150> 60/186,350

<151> 2000-03-02

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<170> PatentIn Ver. 2.0

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						295				300					
Trp	Ala	Ser	Asn	Ile	Ala	Ser	Cys	Ser	Gly	Pro	Leu	Tyr	Leu	Ala	Ala
305					310					315					320
Val	Tyr	Gly	His	Leu	Asp	Cys	Phe	Arg	Leu	Leu	Leu	Leu	His	Gly	Ala
				325				330						335	
Asp	Pro	Asp	Tyr	Asn	Cys	Thr	Asp	Gln	Gly	Leu	Leu	Ala	Arg	Val	Pro

[illegible]

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<210> 22
<211> 141
<212> PRT
<213> Homo sapiens

<400> 22
Met Lys Val Lys Ser Leu Glu Asp Ala Glu Lys Asn Pro Lys Ala Ile
  1              5              10              15

Asp Thr Trp Ile Glu Ser Ile Ser Glu Leu His Arg Ser Lys Pro Pro
      20              25              30

Ala Thr Val His Tyr Thr Arg Pro Met Pro Asp Ile Asp Thr Leu Met
      35              40              45

Gln Glu Trp Ser Pro Glu Phe Glu Glu Leu Leu Gly Lys Val Ser Leu
  50              55              60

Pro Thr Ala Glu Ile Asp Cys Ser Leu Ala Glu Tyr Ile Asp Met Ile
  65              70              75              80

Cys Ala Ile Leu Asp Ile Pro Val Tyr Lys Ser Arg Ile Gln Ser Leu
      85              90              95

His Leu Leu Phe Ser Leu Tyr Ser Glu Phe Lys Asn Ser Gln His Phe
      100             105             110

Lys Ala Leu Ala Glu Gly Lys Lys Ala Phe Thr Pro Ser Ser Asn Ser
      115             120             125

Thr Ser Gln Ala Gly Asp Met Glu Thr Leu Thr Phe Ser
      130             135             140

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<400> 23
Ala Arg Gly Ile Ile Lys Ile Val His Lys Asn Arg Ala Gln Met Leu
1 5 10 15
Thr Arg Asp Arg Ala Phe Glu Ser Thr Leu Lys Ser Trp Glu Asp Lys
20 25 30

Gln	Lys	Cys	Asp	Ser	Gly	Lys	Pro	Val	Leu	Arg	Thr	His	Leu	Tyr	Ile	
		35					40					45				
His	His	Ala	Ile	Asp	Leu	Ala	Thr	Glu	Glu	Val	Ser	Gln	Met	Gln	Leu	
	50					55					60					
Cys	Ser	Gln	Ala	Ala	Glu	Glu	Leu	Ile	Thr	Arg	Ile	Cys	Asp	Ala	Ala	
	65				70					75					80	
Thr	Ile	His	Cys	Leu	Leu	Glu	Gln	Glu	Leu	Ala	His	Ala	Val	Asn	Ala	
				85					90					95		
Cys	Ser	His	Ala	Leu	Asn	Lys	Ala	Asn	Pro	Arg	Cys	Pro	Glu	Ser	Leu	
		100						105					110			
Thr	Arg	Asp	Thr	Ala	Thr	Glu	Ile	Ala	Ile	Asn	Val	Lys	Ala	Leu	Tyr	
	115					120						125				
Asn	Glu	Thr	Glu	Ser	Leu	Leu	Val	Gly	Arg	Val	Pro	Leu	Gln	Leu	Glu	
	130					135					140					
Ser	Pro	His	Glu	Glu	Arg	Val	Ser	Asn	Ala	Leu	His	Ser	Val	Glu	Val	
	145				150					155					160	
Glu	Leu	Gln	Lys	Leu	Thr	Glu	Ile	Pro	Trp	Leu	Tyr	Tyr	Ile	Leu	His	
			165					170					175			
Pro	Asn	Glu	Asp	Glu	Glu	Pro	Pro	Met	Asp	Cys	Thr	Lys	Arg	Asn	Asn	
		180						185					190			
Arg	Ser	Thr	Val	Phe	Arg	Ile	Val	Pro	Lys	Phe	Lys	Lys	Glu	Lys	Val	
	195						200					205				
Gln	Lys	Gln	Lys	Thr	Ser	Ser	Gln	Pro	Gly	Ser	Gly	Asp	Thr	Glu	Ser	
	210				215						220					
Gly	Ser	Cys	Glu	Ala	Asn	Ser	Pro	Gly	Asn							
	225				230											
<210> 24																
<211> 96																
<212> PRT																
<213> Homo sapiens																
<400> 24																
Met	Ala	Glu	Val	Glu	Thr	Leu	Lys	Arg	Leu	Gln	Ser	Gln	Lys	Gly		
	1			5				10					15			
Val	Gln	Gly	Ile	Ile	Val	Val	Asn	Thr	Glu	Gly	Ile	Pro	Ile	Lys	Ser	
		20					25					30				
Thr	Met	Asp	Asn	Pro	Thr	Thr	Thr	Gln	Tyr	Ala	Ser	Leu	Met	His	Ser	
	35						40					45				
Phe	Ile	Leu	Lys	Ala	Arg	Ser	Thr	Val	Arg	Asp	Ile	Asp	Pro	Gln	Asn	
	50															

Asp Leu Thr Phe Leu Arg Ile Arg Ser Lys Lys Asn Glu Ile Met Val
 65 70 75 80

Ala Pro Asp Lys Asp Tyr Phe Leu Ile Val Ile Gln Asn Pro Thr Glu
 85 90 95

<210> 25
 <211> 696
 <212> PRT
 <213> Homo sapiens

<400> 25
 Met Lys Lys Lys Ile Glu Gly Tyr Gln Glu Phe Ser Ala Lys Pro Leu
 1 5 10 15
 Ala Ser Arg Val Asp Pro Glu Lys Asp Asn Glu Thr Asp Gln Gly Ser
 20 25 30
 Asn Ser Glu Lys Val Ala Glu Glu Ala Gly Glu Lys Gly Pro Thr Pro
 35 40 45
 Pro Leu Pro Ser Ala Pro Leu Ala Pro Glu Lys Asp Ser Ala Leu Val
 50 55 60
 Pro Gly Ala Ser Lys Gln Pro Leu Thr Ser Pro Ser Ala Leu Val Asp
 65 70 75 80
 Ser Lys Gln Glu Ser Lys Leu Cys Cys Phe Thr Glu Ser Pro Glu Ser
 85 90 95
 Glu Pro Gln Glu Ala Ser Phe Pro Ser Phe Pro Thr Thr Gln Pro Pro
 100 105 110
 Leu Ala Asn Gln Asn Glu Thr Glu Asp Asp Lys Leu Pro Ala Met Ala
 115 120 125
 Asp Tyr Ile Ala Asn Cys Thr Val Lys Val Asp Gln Leu Gly Ser Asp
 130 135 140
 Asp Ile His Asn Ala Leu Lys Gln Thr Pro Lys Val Leu Val Val Gln
 145 150 155 160
 Ser Phe Asp Met Phe Lys Asp Lys Asp Leu Thr Gly Pro Met Asn Glu
 165 170 175
 Asn His Gly Leu Asn Tyr Thr Pro Leu Leu Tyr Ser Arg Gly Asn Pro
 180 185 190
 Gly Ile Met Ser Pro Leu Ala Lys Lys Lys Leu Leu Ser Gln Val Ser
 195 200 205
 Gly Ala Ser Leu Ser Ser Ser Tyr Pro Tyr Gly Ser Pro Pro Pro Leu
 210 215 220

Leu 225	Ser	Lys	Lys	Lys	Leu 230	Ile	Ala	Arg	Asp	Asp 235	Leu	Cys	Ser	Ser	Leu 240
Ser	Gln	Thr	His	His 245	Gly	Gln	Ser	Thr	Asp 250	His	Met	Ala	Val	Ser	Arg
Pro	Ser	Val	Ile 260	Gln	His	Val	Gln	Ser	Phe 265	Arg	Ser	Lys	Pro	Ser	Glu
Glu	Arg	Lys 275	Thr	Ile	Asn	Asp	Ile 280	Phe	Lys	His	Glu	Lys 285	Leu	Ser	Arg
Ser	Asp 290	Pro	His	Arg	Cys	Ser 295	Phe	Ser	Lys	His 300	His	Leu	Asn	Pro	Leu
Ala 305	Asp	Ser	Tyr	Val 310	Leu	Lys	Gln	Glu	Ile	Gln 315	Glu	Gly	Lys	Asp	Lys 320
Leu	Leu	Glu	Lys 325	Arg	Ala	Leu	Pro	His	Ser 330	His	Met	Pro	Ser	Phe	Leu
Ala	Asp	Phe 340	Tyr	Ser	Ser	Pro	His	Leu 345	His	Ser	Leu	Tyr	Arg 350	His	Thr
Glu	His 355	His	Leu	His	Asn	Glu	Gln 360	Thr	Ser	Lys	Tyr	Pro 365	Ser	Arg	Asp
Met 370	Tyr	Arg	Glu	Ser	Glu	Asn 375	Ser	Ser	Phe	Pro 380	Ser	His	Arg	His	Gln
Glu 385	Lys	Leu	His	Val 390	Asn	Tyr	Leu	Thr	Ser	Leu 395	His	Leu	Gln	Asp	Lys 400
Lys	Ser	Ala	Ala 405	Ala	Glu	Ala	Pro	Thr	Asp 410	Asp	Gln	Pro	Thr	Asp	Leu
Ser	Leu	Pro 420	Lys	Asn	Pro	His	Lys	Pro 425	Thr	Gly	Lys	Val	Leu 430	Gly	Leu
Ala 435	His	Ser	Thr	Thr	Gly	Pro 440	Gln	Glu	Ser	Lys	Gly	Ile 445	Ser	Gln	Phe
Gln 450	Val	Leu	Gly	Ser	Gln	Ser 455	Arg	Asp	Cys	His 460	Pro	Lys	Ala	Cys	Arg
Val 465	Ser	Pro	Met	Thr 470	Met	Ser	Gly	Pro	Lys	Lys 475	Tyr	Pro	Glu	Ser	Leu
Ser	Arg	Ser	Gly 485	Lys	Pro	His	His	Val 490	Arg	Leu	Glu	Asn	Phe 495	Arg	Lys
Met	Glu	Gly 500	Met	Val	His	Pro	Ile 505	Leu	His	Arg	Lys	Met 510	Ser	Pro	Gln
Asn 515	Ile	Gly	Ala	Ala	Arg 520	Pro	Ile	Lys	Arg	Ser	Leu 525	Glu	Asp	Leu	Asp
Leu	Val	Ile	Ala	Gly	Lys	Lys	Ala	Arg	Ala	Val	Ser	Pro	Leu	Asp	Pro

530 535 540
 Ser Lys Glu Val Ser Gly Lys Glu Lys Ala Ser Glu Gln Glu Ser Glu
 545 550 555 560
 Gly Ser Lys Ala Ala His Gly Gly His Ser Gly Gly Gly Ser Glu Gly
 565 570 575
 His Lys Leu Pro Leu Ser Ser Pro Ile Phe Pro Gly Leu Tyr Ser Gly
 580 585 590
 Ser Leu Cys Asn Ser Gly Leu Asn Ser Arg Leu Pro Ala Gly Tyr Ser
 595 600 605
 His Ser Leu Gln Tyr Leu Lys Asn Gln Thr Val Leu Ser Pro Leu Met
 610 615 620
 Gln Pro Leu Ala Phe His Ser Leu Val Met Gln Arg Gly Ile Phe Thr
 625 630 635 640
 Ser Pro Thr Asn Ser Gln Gln Leu Tyr Arg His Leu Ala Ala Ala Thr
 645 650 655
 Pro Val Gly Ser Ser Tyr Gly Asp Leu Leu His Asn Ser Ile Tyr Pro
 660 665 670
 Leu Ala Ala Ile Asn Pro Gln Ala Ala Phe Pro Ser Ser Gln Leu Ser
 675 680 685
 Ser Val His Pro Ser Thr Lys Leu
 690 695

 <210> 26
 <211> 132
 <212> PRT
 <213> Homo sapiens

 <400> 26
 His Glu Ile Glu His Gly Glu Phe Glu Lys Asn Leu Tyr Gly Thr Ser
 1 5 10 15
 Ile Asp Ser Val Arg Gln Val Ile Asn Ser Gly Lys Ile Cys Leu Leu
 20 25 30
 Ser Leu Arg Thr Gln Ser Leu Lys Thr Leu Arg Asn Ser Asp Leu Lys
 35 40 45
 Pro Tyr Ile Ile Phe Ile Ala Pro Pro Ser Gln Glu Arg Leu Arg Ala
 50 55 60
 Leu Leu Ala Lys Glu Gly Lys Asn Pro Lys Pro Glu Glu Leu Arg Glu
 65 70 75 80
 Ile Ile Glu Lys Thr Arg Glu Met Glu Gln Asn Asn Gly His Tyr Phe
 85 90 95
 Asp Thr Ala Ile Val Asn Ser Asp Leu Asp Lys Ala Tyr Gln Glu Leu

100 105 110
 Leu Arg Leu Ile Asn Lys Leu Asp Thr Glu Pro Gln Trp Val Pro Ser
 115 120 125

Thr Trp Leu Arg
 130

<210> 27
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 27
 Met Leu Ser Ser Gly Thr Val Gly Lys Arg Gln Asn Asn Ser Gln Phe
 1 5 10 15

Gln Val Pro Lys Met Pro Trp Lys Ala Ser Val Glu Gly Thr Arg Thr
 20 25 30

Asn His Pro Ala Lys Ile Pro Ala Gly Ser Ser Ser Ala Leu Gly Ser
 35 40 45

Trp Arg His Asp Gly Leu Leu Gln Glu His Thr Glu Lys Ser Thr Gln
 50 55 60

Lys Gly Tyr Phe Gly Glu Ala Val Trp Thr Leu Arg Cys Thr Ala Glu
 65 70 75 80

Gly Glu Leu Gly Asn Pro Arg Pro Glu Val Ser Ile Gly Tyr Phe
 85 90 95

<210> 28
 <211> 558
 <212> PRT
 <213> Homo sapiens

<400> 28
 Met Tyr Ser Pro Ile Ile Tyr Gln Ala Leu Cys Glu His Val Gln Thr
 1 5 10 15

Gln Met Ser Leu Met Asn Asp Leu Thr Ser Lys Asn Ile Pro Asn Gly
 20 25 30

Ile Pro Ala Val Pro Cys His Ala Pro Ser His Ser Glu Ser Gln Ala
 35 40 45

Thr Pro His Ser Ser Tyr Gly Leu Cys Thr Ser Thr Pro Val Trp Ser
 50 55 60

Leu Gln Arg Pro Pro Cys Pro Pro Lys Val His Ser Glu Val Gln Thr
 65 70 75 80

Asp Gly Asn Ser Gln Phe Ala Ser Gln Gly Lys Thr Val Ser Ala Thr
 85 90 95

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Cys	Thr	Asp	Val	Leu	Arg	Asn	Ser	Phe	Asn	Thr	Ser	Pro	Gly	Val	Pro
			100					105					110		
Cys	Ser	Leu	Pro	Lys	Thr	Asp	Ile	Ser	Ala	Ile	Pro	Thr	Leu	Gln	Gln
		115				120					125				
Leu	Gly	Leu	Val	Asn	Gly	Ile	Leu	Pro	Gln	Gln	Gly	Ile	His	Lys	Glu
	130				135						140				
Thr	Asp	Leu	Leu	Lys	Cys	Ile	Gln	Thr	Tyr	Leu	Ser	Leu	Phe	Arg	Ser
	145				150					155					160
His	Gly	Lys	Glu	Thr	His	Leu	Asp	Ser	Gln	Thr	His	Arg	Ser	Pro	Thr
				165				170						175	
Gln	Ser	Gln	Pro	Ala	Phe	Leu	Ala	Thr	Asn	Glu	Glu	Lys	Cys	Ala	Arg
			180					185					190		
Glu	Gln	Ile	Arg	Glu	Ala	Thr	Ser	Glu	Arg	Lys	Asp	Leu	Asn	Ile	His
		195					200					205			
Val	Arg	Asp	Thr	Lys	Thr	Val	Lys	Asp	Val	Gln	Lys	Ala	Lys	Asn	Val
	210					215					220				
Asn	Lys	Thr	Ala	Glu	Lys	Val	Arg	Ile	Ile	Lys	Tyr	Leu	Leu	Gly	Glu
	225				230					235				240	
Leu	Lys	Ala	Leu	Val	Ala	Glu	Gln	Glu	Asp	Ser	Glu	Ile	Gln	Arg	Leu
		245							250					255	
Ile	Thr	Glu	Met	Glu	Ala	Cys	Ile	Ser	Val	Leu	Pro	Thr	Val	Ser	Gly
		260						265					270		
Asn	Thr	Asp	Ile	Gln	Val	Glu	Ile	Ala	Leu	Ala	Met	Gln	Pro	Leu	Arg
	275						280					285			
Ser	Glu	Asn	Ala	Gln	Leu	Arg	Arg	Gln	Leu	Arg	Ile	Leu	Asn	Gln	Gln
	290					295					300				
Leu	Arg	Glu	Gln	Gln	Lys	Thr	Gln	Lys	Pro	Ser	Gly	Ala	Val	Asp	Cys
	305				310					315					320
Asn	Leu	Glu	Leu	Phe	Ser	Leu	Gln	Ser	Leu	Asn	Met	Ser	Leu	Gln	Asn
			325						330					335	
Gln	Leu	Glu	Glu	Ser	Leu	Lys	Ser	Gln	Glu	Leu	Leu	Gln	Ser	Lys	Asn
		340						345					350		
Glu	Glu	Leu	Leu	Lys	Val	Ile	Glu	Asn	Gln	Lys	Asp	Glu	Asn	Lys	Lys
		355					360					365			
Phe	Ser	Ser	Ile	Phe	Lys	Asp	Lys	Asp	Gln	Thr	Ile	Leu	Glu	Asn	Lys
						375					380				
Gln	Gln	Tyr	Asp	Ile	Glu	Ile	Thr	Arg	Ile	Lys	Ile	Glu	Leu	Glu	Glu
				390						395					400
Ala	Leu	Val	Asn	Val	Lys	Ser	Ser	Gln	Phe	Lys	Leu	Glu	Thr	Ala	Glu

405 410 415
 Lys Glu Asn Gln Ile Leu Gly Ile Thr Leu Arg Gln Arg Asp Ala Glu
 420 425 430
 Val Thr Arg Leu Arg Glu Leu Thr Arg Thr Leu Gln Thr Ser Met Ala
 435 440 445
 Lys Leu Leu Ser Asp Leu Ser Val Asp Ser Ala Arg Cys Lys Pro Gly
 450 455 460
 Asn Asn Leu Thr Lys Ser Leu Leu Asn Ile His Asp Lys Gln Leu Gln
 465 470 475 480
 His Asp Pro Ala Pro Ala His Thr Ser Ile Met Ser Tyr Leu Asn Lys
 485 490 495
 Leu Glu Thr Asn Tyr Ser Phe Thr His Ser Glu Pro Leu Ser Thr Ile
 500 505 510
 Lys Asn Glu Glu Thr Ile Glu Pro Asp Lys Thr Tyr Glu Asn Val Leu
 515 520 525
 Ser Ser Arg Gly Pro Gln Asn Ser Asn Thr Arg Gly Met Glu Glu Ala
 530 535 540
 Ser Ala Pro Gly Ile Ile Ser Ala Leu Phe Lys Thr Gly Phe
 545 550 555

 <210> 29
 <211> 52
 <212> PRT
 <213> Homo sapiens

 <400> 29
 Met Thr Asn Pro Phe Leu Ser Ser Val Ser Thr Phe Phe Ser Pro Phe
 1 5 10 15
 Leu Pro Lys Ala Asn Phe Leu Cys Ser Ala His Arg Asn Ala His Ser
 20 25 30
 Val Leu Arg Lys Glu Val Leu Cys Asn Ser Lys Ile Ala Ser Lys Ser
 35 40 45
 Gln Leu Asp Arg
 50